

City of Pasadena

Noise Element

INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

SEP 16 2004

UNIVERSITY OF CALIFORNIA

Last Revised October 14, 2002 (Res. No. 8161)

Revised June 4, 1985 (Res. No. 5353)

Adopted September 16, 1975 (Res. No. 2647)

INTRODUCTION

The City of Pasadena is affected by several different sources of noise, including automobile traffic, Rose Bowl events, commercial activity, and periodic nuisances such as construction, loud parties, and other events. The Noise Element is intended to identify these sources and provide objectives and policies that ensure that noise from these sources does not create an unacceptable noise environment. Noise is a normal part of the urban environment. However, controlling noise sources can make a substantial improvement in the quality of life for City residents.

The major noise sources in Pasadena are listed below and are discussed in detail in the Existing and Future Conditions report:

Transportation-Related Noise Sources

- Traffic on Interstates 210 and 710, State Routes 134 and 110
- Street Traffic
- Future Light Rail
- Aircraft Flyovers

Other Noise Sources

- Central Arroyo
- Commercial Activity
- Nuisance Noise
- Pasadena Police Department Eaton Canyon Shooting Range

The overriding objective of the Noise Element in the General Plan is to minimize exposure of residents, workers, and visitors to excessive noise levels, while maximizing the Land Use Element's objectives to encourage mixed-use development in the Central District and other Specific Plan areas as well as to promote economic vitality. Specific objectives and policies relevant to each of the specific noise issues are listed below.

INTRODUCTION

The purpose of this study is to investigate the effects of the proposed system on the performance of the system. The study is divided into two main parts: a theoretical analysis and an experimental evaluation. The theoretical analysis is based on the principles of the system and the experimental evaluation is based on the results of the experiments. The results of the experiments show that the proposed system has a significant effect on the performance of the system.

The results of the experiments show that the proposed system has a significant effect on the performance of the system.

THEORETICAL ANALYSIS

- 1. The proposed system is based on the principles of the system.
- 2. The proposed system is based on the principles of the system.
- 3. The proposed system is based on the principles of the system.
- 4. The proposed system is based on the principles of the system.

EXPERIMENTAL EVALUATION

- 1. The proposed system is based on the principles of the system.
- 2. The proposed system is based on the principles of the system.
- 3. The proposed system is based on the principles of the system.
- 4. The proposed system is based on the principles of the system.

The results of the experiments show that the proposed system has a significant effect on the performance of the system. The results of the experiments show that the proposed system has a significant effect on the performance of the system. The results of the experiments show that the proposed system has a significant effect on the performance of the system.

This page left blank intentionally

TRANSPORTATION-RELATED NOISE SOURCES

Interstates 210 and 710, State Routes 134 and 110

Motor vehicle noise is the most common and widely dispersed continuous source in the City of Pasadena. The roadways that generate the most noise include the Foothill Freeway (Interstate 210) and the Ventura Freeway (State Route 134). In different parts of the City, Interstate 210 is both a north-south and east-west travel corridor. State Route 134 is an east-west travel corridor in the western portions of the City. To a lesser extent, the Long Beach Freeway is used for north-south travel. The City is also minimally affected by noise associated with the one-quarter mile segment of the Pasadena Freeway (SR110), which enters the City at the southern end of Arroyo Parkway and terminates at Glenarm Street.

Objective 1 The City will work to reduce the effects of noise from freeway traffic on residential and other sensitive land uses.

Policy 1a The City will encourage noise-compatible land uses near existing freeways.

Policy 1b The City will cooperate with Caltrans and Metropolitan Transportation Authority (MTA) to landscape or install noise attenuation along freeways adjacent to residential or noise sensitive uses.

Street Traffic

The major north-south roadways in the City include Lincoln Avenue, Fair Oaks Avenue, Los Robles Avenue, Lake Avenue, Allen Avenue, Altadena Drive, San Gabriel Boulevard, and Rosemead Boulevard. The major east-west roadways include Orange Grove Boulevard, Walnut Street, Colorado Boulevard, Sierra Madre Boulevard, and Del Mar Boulevard. Noise from these major roadways may affect sensitive receptors.

Objective 2 The City will work to reduce the effects of traffic-generated noise from major roadways on residential and other sensitive land uses.

Policy 2a The City will encourage noise-compatible land uses along major roadways.

THE HISTORY OF THE UNITED STATES

OF AMERICA

FROM THE FIRST SETTLEMENTS TO THE PRESENT TIME

The history of the United States is a story of growth and development. It begins with the first settlers who came to the New World in search of a better life. They found a land of opportunity, but also a land of challenges. The early years were marked by struggle and hardship, but the spirit of the pioneers was unyielding. They built a nation from scratch, one that was based on the principles of liberty and justice for all. Over the centuries, the United States has grown from a small colony to a great power, and its influence has spread across the globe. The story of the United States is a testament to the power of the human spirit and the ability of a people to overcome adversity and build a better future.

The United States has a rich and diverse history, and its people have made many contributions to the world. From the founding of the nation to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

The United States is a land of many firsts, and it is a land that has always been at the forefront of progress. From the first settlers to the present day, the United States has been a land of innovation and progress. It has been a land where dreams have come true and where the future has been shaped by the vision of its people. The history of the United States is a story of hope and possibility, and it is a story that continues to inspire and motivate people around the world.

- Policy 2b* The City will encourage site planning and traffic control measures that minimize the effects of traffic noise in residential zones.
- Policy 2c* The City will encourage the use of alternative transportation modes as stipulated in the Mobility Element (walking, bicycling, transit use, electric vehicles) to minimize traffic noise in the City.
- Policy 2d* The City will work with local and regional transit agencies and businesses to provide transportation services that reduce traffic and associated noise as stipulated in the Mobility Element.
- Policy 2e* The City will work to reduce the effects of traffic-related noise in residential neighborhoods, including but not limited to neighborhoods adjacent to South Orange Grove Boulevard, Saint John Avenue, Pasadena Avenue, California Boulevard, and other busy streets passing thorough residential neighborhoods.

Future Light Rail

The Los Angeles to Pasadena Metro Construction Authority is constructing a passenger light rail service that will connect Pasadena business centers with downtown Los Angeles. Future train traffic will generate noise that may exceed acceptable levels for noise-sensitive uses along the rail corridor.

- Objective 3** The City will minimize noise from the Los Angeles to Pasadena Metro Line on residential and other sensitive land uses.
- Policy 3a* The City will encourage noise-compatible land uses and mitigation measures near the Los Angeles to Pasadena Metro Line rail system.
- Policy 3b* After commencing operations and regularly thereafter, the City will work with the Los Angeles to Pasadena Metro Blue Line Construction Authority and/or the Los Angeles County Metropolitan Transportation Authority (LACMTA) to install noise attenuation features if the Gold Line (formerly known as the Blue Line) adversely affects existing adjacent residential or other noise-sensitive uses (refer to Implementation Measure 13).

It is a pleasure to have you here today. I am sure you will find the program most interesting and profitable.

The first part of the program will be a presentation by Mr. [Name] on the subject of "The Future of the Industry."

After the presentation, there will be a question and answer period. Please feel free to ask any questions you may have.

Following the question and answer period, there will be a luncheon break. Please join us for lunch at 12:30 PM.

Thank You

We are very grateful to you for attending this program. Your presence is greatly appreciated.

Thank you again for your interest and participation.

We hope you will find this program a valuable experience.

With best wishes,
[Signature]
[Name]
[Title]
[Company]

Aircraft Flyovers

Activity from commercial and private aircraft, emergency and traffic-monitoring helicopters contribute to the general noise environment. In particular, low-flying helicopters are a source of noise complaints in the City.

Objective 4 Considering the City's legal authority, the City will encourage minimizing noise from aircraft flyovers on residential and other sensitive land uses.

Policy 4a The City will work with local and regional agencies, including Los Angeles County and other agencies utilizing Fire Camp #2, to reduce excessive noise associated with aircraft flyovers.

Policy 4b The City will work with federal agencies to determine appropriate standards for helicopter noise.

Policy 4c The Pasadena Police Department will work to minimize helicopter noise throughout the City to the extent feasible, taking into account operational requirements and the need to protect public health and safety.

Policy 4d The City will work with federal agencies to reduce airplane noise to the extent feasible.

Journal Entries

1. On the 1st of January, 1900, I started my journal with a blank page. I had no idea what I was going to write, but I knew I had to start somewhere. I wrote down the date and the weather, and then I wrote about the people I met. I was very nervous at first, but I soon got into a routine. I wrote every day, and I found that it helped me to organize my thoughts and to remember the things that had happened to me.

2. On the 2nd of January, 1900, I went to the market. I bought some fruit and some vegetables, and I also bought some meat. I was very happy to go to the market, because I had never been before. I saw many things that I had never seen before, and I was very interested in them. I bought some of the things, and I was very happy to do so.

3. On the 3rd of January, 1900, I went to the school. I was very nervous, but I went anyway. I was the only girl in the class, and I was very shy. I was very happy to go to school, because I had never been before. I saw many things that I had never seen before, and I was very interested in them. I bought some of the things, and I was very happy to do so.

4. On the 4th of January, 1900, I went to the church. I was very nervous, but I went anyway. I was the only girl in the church, and I was very shy. I was very happy to go to church, because I had never been before. I saw many things that I had never seen before, and I was very interested in them. I bought some of the things, and I was very happy to do so.

5. On the 5th of January, 1900, I went to the hospital. I was very nervous, but I went anyway. I was the only girl in the hospital, and I was very shy. I was very happy to go to the hospital, because I had never been before. I saw many things that I had never seen before, and I was very interested in them. I bought some of the things, and I was very happy to do so.

6. On the 6th of January, 1900, I went to the court. I was very nervous, but I went anyway. I was the only girl in the court, and I was very shy. I was very happy to go to the court, because I had never been before. I saw many things that I had never seen before, and I was very interested in them. I bought some of the things, and I was very happy to do so.

This page left blank intentionally

OTHER NOISE SOURCES

Central Arroyo

Sports, music and other events at the Rose Bowl, Brookside Park, the Rose Bowl Aquatic Center, and the future Kids Space Museum in the Fannie Morrison Center have the potential to generate noise in the Central Arroyo. The noise levels for these activities are highly variable due to the fact that both the number of events occurring and the noise levels experienced from the events can fluctuate. However, a waiver from the Noise Restrictions Ordinance (Chapter 9.36 of the Municipal Code) has been required for some events because noise from those events exceeded permitted levels.

Objective 5 The City will balance the effects of noise associated with events held in the Central Arroyo with the benefits of events occurring at Central Arroyo facilities.

Policy 5a The City will continue to seek improvements to noise-generating equipment and activities at the Rose Bowl, Aquatics Center, Jackie Robinson Field, Brookside Park, Area H, and the future Kids Space Museum in order to minimize the effects of noise on nearby residents.

Policy 5b The City will continue to coordinate events in the Central Arroyo to minimize noise to the degree feasible.

Commercial Activity

Noise generated by commercial operations, maintenance, truck deliveries and traffic can affect adjacent residential areas and other sensitive land uses. Future industrial and commercial development should generally be located away from existing and planned residential and other sensitive zones. Day and night activities and special events in the Central District and other mixed-use areas are expected to generate urban noise throughout the year.

Objective 6 The City will minimize noise spillovers from commercial and industrial operations into adjacent residential neighborhoods and other sensitive uses, while maximizing the Land Use Element's objectives to encourage mixed-use development in the Central District and other Specific Plan areas as well as to promote economic vitality.

CHAPTER 10: THE HISTORY OF THE UNITED STATES

Introduction

The history of the United States is a complex and multifaceted story that spans centuries. It is a story of exploration, discovery, and the struggle for freedom and equality. The early years of the nation were marked by the arrival of European settlers and the displacement of Native Americans. The American Revolution was a pivotal moment in the nation's history, leading to the birth of a new country. The 19th century was a time of rapid growth and change, with the Industrial Revolution and the expansion of the territory. The 20th century was a period of great challenges, including the Great Depression, World War II, and the Civil Rights Movement. Today, the United States continues to evolve and shape the world.

The purpose of this chapter is to provide a comprehensive overview of the history of the United States, from its early beginnings to the present day. We will explore the major events, figures, and movements that have shaped the nation, and we will discuss the challenges and opportunities that lie ahead.

The first section of the chapter will focus on the early years of the nation, from the arrival of the first settlers to the American Revolution. We will discuss the role of the Native Americans, the struggles of the early settlers, and the events that led to the birth of the United States. The second section will cover the 19th century, including the Industrial Revolution, the expansion of the territory, and the Civil War. The third section will focus on the 20th century, including the Great Depression, World War II, and the Civil Rights Movement. The final section will discuss the challenges and opportunities of the 21st century.

Throughout the chapter, we will use a variety of sources, including primary documents, secondary texts, and multimedia resources, to provide a rich and detailed account of the history of the United States.

Early History

The early history of the United States is a story of exploration and discovery. The first Europeans to arrive in North America were the Norsemen, who sailed to the coast of Newfoundland in the late 15th century. The Spanish and French explorers followed, seeking new lands and resources. The English settlers arrived in the early 17th century, establishing the first permanent colonies. The Native Americans, who had lived in the region for thousands of years, played a crucial role in the early history of the United States, providing the settlers with food, shelter, and guidance. The early years of the nation were marked by the struggle for survival and the search for a better life.

The American Revolution was a pivotal moment in the nation's history, leading to the birth of a new country. The colonists, who had grown increasingly discontent with British rule, fought for independence. The Revolution was a struggle for freedom and equality, and it was a triumph for the American people. The new nation was born, and the United States was established. The 19th century was a time of rapid growth and change, with the Industrial Revolution and the expansion of the territory. The 20th century was a period of great challenges, including the Great Depression, World War II, and the Civil Rights Movement. Today, the United States continues to evolve and shape the world.

- Policy 6a* The City will encourage automobile and truck access to industrial and commercial properties abutting residential zones to be located at the maximum practical distance from residential zones.
- Policy 6b* The City will limit the use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment on commercial properties if their activity will result in noise that adversely affects residential zones.
- Policy 6c* The City will encourage limitations on the hours of truck deliveries to industrial and commercial properties abutting residential zones unless there is no feasible alternative or there are substantial transportation benefits for scheduling deliveries at another hour.

Nuisance Noise

The City occasionally receives complaints about individual sources of nuisance noise, including loud parties, events, and gardening equipment. Construction activity is also a source of occasional temporary nuisance noise throughout the City. These and other such nuisance noises are common to cities and, because of their unpredictable nature, must be addressed on a case-by-case basis.

- Objective 7* The City will minimize the effects of nuisance noise on sensitive land uses as defined in Figure 1 to the degree feasible.
- Policy 7a* Whenever possible, City-sponsored events that generate noise will be scheduled during hours when effects would be minimal.
- Policy 7b* The City will encourage limitations on construction activities adjacent to sensitive noise receptors as defined in Figure 1.
- Policy 7c* The City will encourage construction and landscaping activities that employ techniques to minimize noise.
- Policy 7d* The City will enforce noise level restrictions contained in the City of Pasadena Noise Regulations (Chapter 9.36 of the Municipal Code), except during federal, State, or local emergencies (such as power generators required for energy emergencies).

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample, the data collection methods, and the statistical analysis.

3. The third part of the report is a discussion of the results of the study. It compares the findings with the previous research and discusses the implications of the study.

4. The fourth part of the report is a conclusion and recommendations. It summarizes the main findings of the study and provides suggestions for future research.

5. The fifth part of the report is a list of references. It includes all the sources used in the study.

6. The sixth part of the report is an appendix. It contains additional information that is not included in the main text of the report.

7. The seventh part of the report is a glossary. It defines the key terms used in the study.

8. The eighth part of the report is a list of figures and tables. It includes all the visual aids used in the study.

9. The ninth part of the report is a list of abbreviations. It includes all the abbreviations used in the study.

10. The tenth part of the report is a list of symbols. It includes all the symbols used in the study.

Figure 1 – Guidelines for Noise Compatible Land Use

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE Ldn or CNEL, dBA						
	55	60	65	70	75	80	85
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES							
RESIDENTIAL - MULTI-FAMILY AND MIXED COMMERCIAL/RESIDENTIAL USE							
TRANSIENT LODGING - MOTELS, HOTELS							
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES							
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES							
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS							
PLAYGROUNDS, NEIGHBORHOOD PARKS							
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES							
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL							
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE							

**CLEARLY ACCEPTABLE**

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

**NORMALLY ACCEPTABLE**

New construction or development should be undertaken after an analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

**CONDITIONALLY ACCEPTABLE**

If new construction or development proceeds, an analysis of the noise reduction requirements should be made and needed noise insulation features included in the design.

**NORMALLY UNACCEPTABLE**

New construction or development should generally not be undertaken, unless it can be demonstrated that an interior level of 45 dBA can be achieved.

* Please note that these guidelines are general and may not apply to specific sites.

Source: California General Plan Guidelines, 1998, as modified by the City of Pasadena, 2002.

1 Aug 1945 - 1 Aug 1945

1 Aug 1945		2 Aug 1945	
1	1000	1	1000
2	1000	2	1000
3	1000	3	1000
4	1000	4	1000
5	1000	5	1000
6	1000	6	1000
7	1000	7	1000
8	1000	8	1000
9	1000	9	1000
10	1000	10	1000
11	1000	11	1000
12	1000	12	1000
13	1000	13	1000
14	1000	14	1000
15	1000	15	1000
16	1000	16	1000
17	1000	17	1000
18	1000	18	1000
19	1000	19	1000
20	1000	20	1000
21	1000	21	1000
22	1000	22	1000
23	1000	23	1000
24	1000	24	1000
25	1000	25	1000
26	1000	26	1000
27	1000	27	1000
28	1000	28	1000
29	1000	29	1000
30	1000	30	1000
31	1000	31	1000

1 Aug 1945 - 1 Aug 1945

1 Aug 1945 - 1 Aug 1945

1 Aug 1945 - 1 Aug 1945

Pasadena Police Department Eaton Canyon Firing Range

Noise generated at the Pasadena Police Department Eaton Canyon Firing Range is a source of concern for residents. Noise from this facility can be particularly irritating due to the impulsive sound emanating from gunfire.

Objective 8 The City will minimize noise emanating from the Eaton Canyon Firing Range into residential areas and other sensitive land uses.

Policy 8a The City will limit exterior activity within the Eaton Canyon Firing Range to work towards noise remaining within acceptable levels at nearby residences.

IMPLEMENTATION MEASURES

The following implementation measures are designed to carry out the objectives and policies of the Noise Element.

- Measure 1* The City will consult the guidelines for noise compatible land use shown on Figure 1 to guide the appropriateness of land uses relative to roadway noise. [Policies 1a, 2a]
- Measure 2* An acoustical study showing the ability to meet state noise insulation standards may be required for any development proposed in an area where the noise level, as indicated on Figures 2 and 3, exceeds the “clearly acceptable level” as determined by the City and shown on Figure 1. [Policies 1a, 2a]
- Measure 3* The City will enforce the California Noise Insulation Standards (Title 25 California Administration Code for future development and redevelopment) to ensure an acceptable interior noise level of 45dBA Ldn in habitable rooms. [Policies 1a, 2a]
- Measure 4* The City will consider the use of alternative paving materials that can reduce traffic noise, as feasible, depending on roadway conditions and cost efficiency. [Policies 1b, 2b]
- Measure 5* The City will consider the use of “traffic calming” devices, to reduce traffic speed in residential zones. [Policies 2b, 2d]
- Measure 6* The City will cooperate with Caltrans in the planning of noise attenuation along freeways. [Policy 1b]
- Measure 7* The City will periodically review major roadways and designated truck routes to reduce traffic in residential zones. [Policy 2b]
- Measure 8* As feasible and practical, new equipment purchased by the City will meet noise performance standards consistent with the best available noise reduction technology. [Policy 7c]

IMPROVING THE QUALITY OF THE ENVIRONMENT

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

The following information is provided for your information and is not intended to be a substitute for professional advice.

- Measure 9* The City will review and update the Noise Restrictions Ordinance at least every five years (Chapter 9.36 of the Pasadena Municipal Code) to ensure effectiveness in controlling noise sources. [Policies 6b, 6c, 7b, 7c]
- Measure 10* The City will enforce Chapter 9.37 of the Pasadena Municipal Code on the hours, use, and maintenance of leaf blowing machines. [Policy 7c]
- Measure 11* The City will consider amending the Pasadena Municipal Code to restrict the use of other landscape equipment and heating, ventilation, and air conditioning (HVAC) equipment if problems arise in the future. [Policy 7d]
- Measure 12* The City will monitor implementation of noise-related mitigation measures outlined in the General Plan FEIR to ensure effectiveness in minimizing noise from mobile sources. [Policies 2c, 2b, 2c]
- Measure 13* The City will monitor implementation of mitigation measures outlined in the Final Supplemental Environmental Impact Report for the Los Angeles Light Rail Transit project (1993) to verify their success in minimizing noise from the Gold Line (formerly known as the Blue Line). [Policy 3b]
- Measure 14* The City will work with the Federal Aviation Administration (FAA) to determine appropriate altitude standards for aircraft flying over congested areas, taking into account public health and safety.* [Policies 4a, 4b, 4d]
- Measure 15* The City will cooperate with the County Fire Department and Metropolitan Water District to minimize noise conflicts associated with Los Angeles County Fire Department helicopter activity. [Policy 4a]
- Measure 16* The City Police Department will continue to implement its standard operating procedures for helicopters to minimize noise conflicts. [Policy 4a]
- Measure 17* The Police Department and the Environmental Health Division will coordinate tracking of community noise complaints. [Policy 7d]

The first part of the report is devoted to a description of the general situation in the country. It is followed by a detailed account of the political and economic conditions. The third part of the report is devoted to a description of the social and cultural conditions. The fourth part of the report is devoted to a description of the military and naval conditions. The fifth part of the report is devoted to a description of the foreign relations of the country.

The second part of the report is devoted to a description of the political and economic conditions. It is followed by a detailed account of the social and cultural conditions. The third part of the report is devoted to a description of the military and naval conditions. The fourth part of the report is devoted to a description of the foreign relations of the country.

The third part of the report is devoted to a description of the social and cultural conditions. It is followed by a detailed account of the military and naval conditions. The fourth part of the report is devoted to a description of the foreign relations of the country.

The fourth part of the report is devoted to a description of the military and naval conditions. It is followed by a detailed account of the foreign relations of the country.

The fifth part of the report is devoted to a description of the foreign relations of the country. It is followed by a detailed account of the foreign relations of the country.

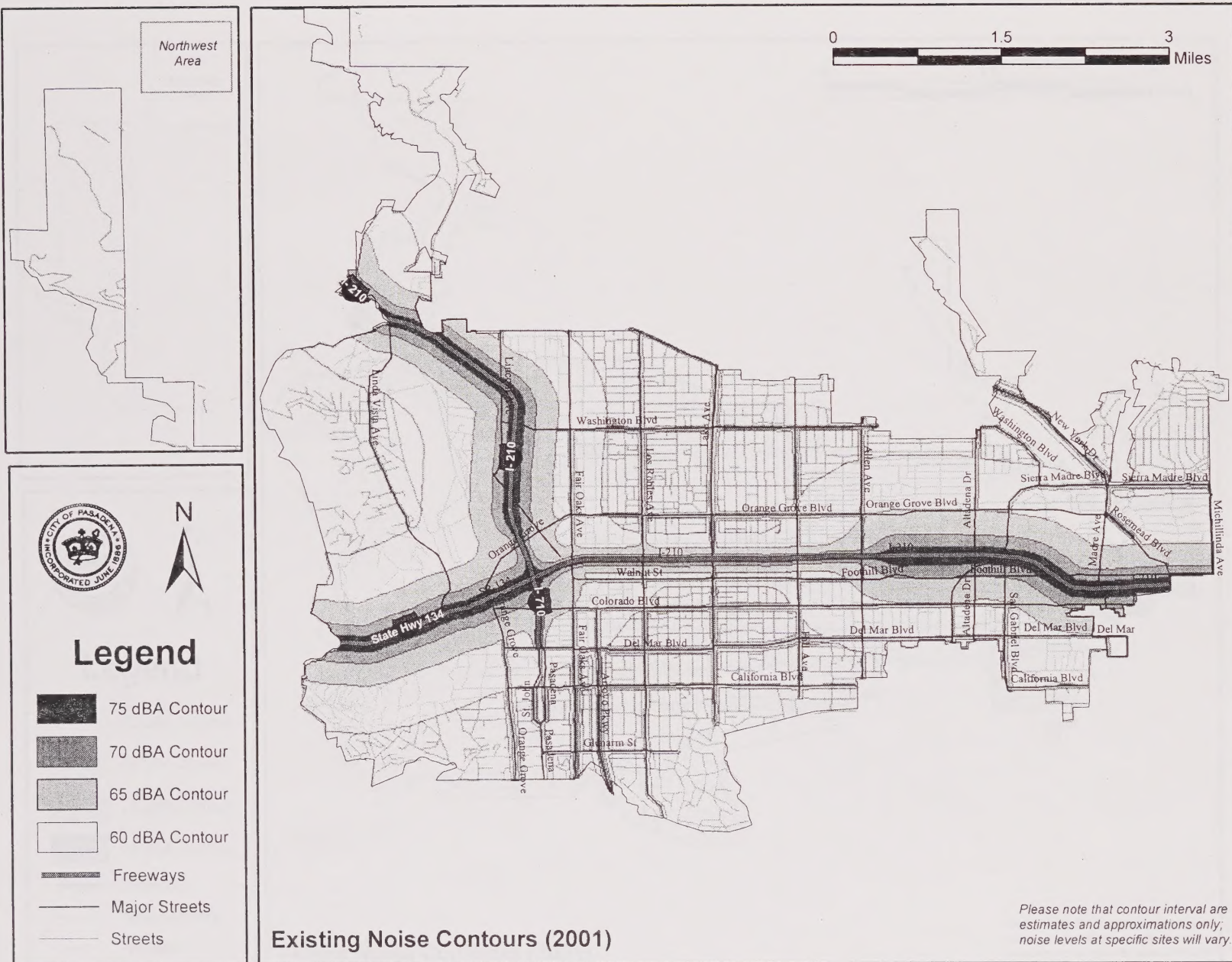
The sixth part of the report is devoted to a description of the foreign relations of the country. It is followed by a detailed account of the foreign relations of the country.

The seventh part of the report is devoted to a description of the foreign relations of the country. It is followed by a detailed account of the foreign relations of the country.

The eighth part of the report is devoted to a description of the foreign relations of the country. It is followed by a detailed account of the foreign relations of the country.

The ninth part of the report is devoted to a description of the foreign relations of the country. It is followed by a detailed account of the foreign relations of the country.

Figure 2 Existing Noise Contours







- Measure 18* The City will consider adoption of financial penalties for repeated violations of Pasadena Noise Restrictions Ordinance (Chapter 9.36 of the Municipal Code). [Policy 7d]
- Measure 19* The City will continue to monitor noise levels at the Pasadena Police Department Eaton Canyon Firing Range. [Policy 8a]
- Measure 20* The City will pursue funding to enclose the pistol range at the Pasadena Police Department Eaton Canyon Firing Range. [Policy 8a]
- Measure 21* The City will encourage new developments to site outdoor commercial areas and gathering places, loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noisier components away from residential zones and other sensitive uses as defined in Figure 1, to the extent feasible, unless the siting of such components near to noise-sensitive uses provides transportation or other benefits. [Policies 7a, 7b, 7c]
- Measure 22* The City will limit new heliports to the Central District or other appropriate areas and will condition new heliports to minimize noise at sensitive uses as defined in Figure 1. [Policy 4c]
- Measure 23* The City will encourage commercial and/or industrial uses abutting residential zones to limit deliveries and trash pick-ups from 7:00 A.M. to 9:00 P.M. Monday through Saturday, unless there are substantial transportation or other benefits for different times. [Policy 6c]
- Measure 24* The City will continue to enforce the Transportation Management Program Ordinance (Chapter 10.64 of the Pasadena Municipal Code) to reduce vehicle trips and associated noise. [Policies 2b, 2c, 2d]
- Measure 25* The City will work with the FAA to limit aircraft operating in the vicinity of the Rose Bowl. [Policies 4c, 4d]
- Measure 26* The City will warn new residents and other sensitive noise receptors (refer to Figure 1) about the potential for noise in the Central District and other mixed-use areas. [Policies 6a, 6b, 6c, 7a]

- Measure 27 The City will periodically monitor noise levels at major events in the Central Arroyo to determine whether or not current restrictions are achieving acceptable noise levels.
[Policy 5a]

NOISE EVALUATION AND MITIGATION

The following provides a general methodology to be followed in the evaluation of potential noise problems associated with new development in Pasadena.

When mitigation must be applied to new development to ensure an acceptable noise environment, the following approaches will be considered. First preference will be given to approach (a). Second preference will be given to approach (b). Due to possible aesthetic concerns regarding the use of sound walls, approach (c) will be used only if neither approach (a) nor (b) will achieve desired noise conditions.

- a. *Site layout, including setbacks, open space separation and shielding of noise sensitive uses with non-noise-sensitive uses; then*
- b. *Acoustical treatment of buildings (see Standard Mitigation Packages below for the types of treatment normally required depending upon the amount of noise reduction needed); then*
- c. *Structural measures: Construction of earthen berms or wood or concrete barriers.*

Standard Mitigation Packages

Below are standard mitigation packages that can generally be used to mitigate interior building noise if the needed noise reduction is 30 dBA or less and the noise problem is from a single source.

1. If a 15-20 dBA reduction is needed, the following may suffice:
 - a. Air conditioning or a mechanical ventilation system; and
 - b. Windows and sliding glass doors should be double-paned glass and mounted in low air infiltration rate frames (0.5 cfm or less, per American National Standard Institute [ANSI] specifications); and
 - c. Solid core exterior doors with perimeter weather stripping and threshold seals
2. If a 20-25 dBA reduction is needed, the following may suffice:

THE
THE
THE

THE

THE
THE

THE
THE
THE

THE
THE

THE
THE

THE
THE

THE

THE
THE

THE
THE

THE
THE

THE
THE
THE

THE
THE

THE
THE

- a. Same as No. 1a-c; and
 - b. Exterior walls consist of stucco or brick veneer. Wood siding with a 1/2" minimum thickness fiberboard underlayer may also be used; and
 - c. Glass in both windows and doors should not exceed 20% of the floor area in a room; and
 - d. Roof or attic vents facing the noise source should be baffled.
3. If a 25-30 dBA reduction is needed, the following may suffice:
- a. Same as No. 2a-d; and
 - b. The interior sheetrock of exterior wall assemblies should be attached to studs by resilient channels. Staggered studs or double walls are acceptable alternatives; and
 - c. Window assemblies should have a laboratory-tested STC rating of 30 or greater (Windows that provide superior noise reduction capability and that are laboratory-tested are sometimes called "sound-rated" windows. In general, these windows have thicker glass and/or increased air space between panes. In contrast, standard energy conservation double-pane glazing with a 1/8" or 1/4" air space may be less effective in reducing noise from some noise sources than single pane glazing).

Standard Disclosure in New or Rehabilitated Residential Developments in Mixed-Use Areas

When the City exercises discretionary review, provides financial assistance, or otherwise facilitates residential projects in the Central District, Specific Plan areas, or other mixed-use districts, written warnings to potential residents about noise should be made a condition of that approval, assistance, or facilitation. The following language is provided as an example:

"All potential buyers and/or renters of residential property within Pasadena's Central District, Specific Plan areas, and/or other mixed-use districts are hereby notified that they may be subject to audible noise levels attributed to business and entertainment-related activities common to such areas, including amplified sound, music, delivery vehicles, pedestrian and vehicular traffic, and other urban noise."



C101746255